08/327,887 PATENT

forming a field oxide layer and a junction layer and gate electrode on said silicon substrate;

forming a first insulating layer on exposed portions of the field oxide layer, the junction layer, and the gate electrode;

forming first plurality of contact holes of substantially equal depth by removing portions of the first insulating layer to expose said junction layer and said gate electrode, respectively:

filling a first metal layer into the first plurality of contact holes, entirely, [so that] the first metal layer [is]

being grown over and [extends] extending slightly beyond said first plurality of contact holes;

forming a conductive layer pattern on the first insulating layer spaced from said first metal layer;

forming a second insulating layer on exposed portions of the conductive layer pattern, the first insulating layer, and the first plurality of contact holes;

forming second plurality of contact holes of substantially equal depth by removing portions of said second insulating layer to expose both the first metal layer and the conductive layer pattern, respectively, the second plurality of contact holes being entirely aligned with the first metal layer, and

filling a second metal layer into said second plurality of contact holes to contact the first metal layer and the conductive layer pattern, respectively.

08/327,887 PATENT

(Amended) A method for filling contact holes with metal by a two-step deposition of metal layers, said method comprising the steps of:

providing a silicon substrate;

forming a field oxide layer and a junction layer and gate electrode on said silicon substrate;

forming a first insulating layer on exposed portions of the field oxide layer, the junction layer, and the gate electrode;

forming first plurality of contact holes of substantially equal depth by removing portions of the first insulating layer to expose said junction layer and said gate electrode, respectively.

filling a first metal layer into entire first plurality of contact holes by one single step, the first metal layer being grown over and extending slightly beyond said first plurality of contact holes;

forming a conductive layer pattern on the first insulating layer spaced from said first metal layer;

forming a second insulating layer on exposed portions of the conductive layer pattern, the first insulating layer, and the first plurality of contact holes;

forming second plurality of contact holes of substantially equal depth by removing portions of said second insulating layer to expose both the first metal layer and the conductive layer pattern, respectively the second plurality of